WHAT IS CLAIMED IS:

1. A method for fabricating an intensity balanced photomask, the method comprising:

forming an alternating aperture phase shifting photomask pattern on a substrate having trenches formed therein; and

forming a layer of antireflective material within the bottom of at least one trench.

2. The method of Claim 1 wherein the antireflective material further comprises Magnesium Fluoride ($MgF_2$).

3. The method of Claim 1 further comprising forming a layer of antireflective material within the bottom of a plurality of the trenches.

4. The method of Claim 1 further comprising forming the layer of antireflective material using a vacuum evaporation technique.

5. The method of Claim 1 further comprising selecting the depth of the antireflective layer to increase light coupling into the trench.

6. The method of Claim 1 further comprising:

selecting a light source having a wavelength for use with the photomask; and

selecting an AR layer thickness of approximately the wavelength divided by four times the refractive index of the antireflective material.

7. The method of Claim 6 further comprising selecting an AR layer thickness equal to the wavelength divided by four times the refractive index of the antireflective material.

8. The method of Claim 1 further comprising the substrate formed from quartz.

9. The method of Claim 1 further comprising depositing an absorber layer on the alternating aperture phase shifting photomask.

10. The method of Claim 1 further comprising depositing a protective layer over the photomask to prevent electrostatic discharge.

11. A method for fabricating a phase shifting mask, the method comprising:

providing an etched transparent substrate having a recessed transmissive area, the substrate having a first refractive index;

depositing an antireflective layer in the recessed transmissive area, the antireflective layer having a second refractive index less than the first refractive index;

depositing an absorber layer on the etched substrate; and

patterning the absorber layer.

12. The method of Claim 11, wherein the antireflective layer has a thickness of approximately one-quarter of a wavelength of incident light.

13. The method of Claim 11, wherein the antireflective material comprises Magnesium Fluoride ($MgF_2$).

14. An alternating aperture phase shifting photomask, comprising:

an etched transparent substrate including a recessed transmissive portion;

an antireflective layer deposited on a bottom surface of the recessed transmissive portion; and

a patterned absorber layer deposited on the substrate.

15. The photomask of Claim 14 further comprising the antireflective layer having a thickness of approximately one-quarter wavelength of incident light.

16. The photomask of Claim 14 further comprising the antireflective layer having a thickness of approximately the wavelength of incident light divided by four times the refractive index of the antireflective material.

17. The phase shifting mask of Claim 14, wherein the substrate has a first refractive index and the antireflective layer has a second refractive index less than the first refractive index.

18. The phase shifting mask of Claim 14, wherein the antireflective material comprises Magnesium Fluoride ($MgF_2$).

19. The phase shifting mask of Claim 14 further comprising the antireflective material deposited using a directional technique.

20. The phase shifting mask of Claim 14 further comprising the antireflective material deposited using a vacuum evaporation technique.